

# HEALTH INFORMATION TECHNOLOGY SYSTEMS & SERVICES

Health information systems (HIS) are designed to manage healthcare data. There are several systems used in the Ethiopian healthcare industry. This booklet contains brief descriptions of the following systems:

Electronic Community Health Information System (eCHIS)

Electronic Medical Record (EMR)

Healthnet

Health Management Information System (HMIS)

Master Facility Registry (MFR)

Public Health Emergency Management (PHEM)

Supply chain systems



# ELECTRONIC COMMUNITY HEALTH INFORMATION SYSTEM (eCHIS)

The eCHIS is a mobile platform that assists in the management of health extension programs through the collection and use of demographic data, health services delivery information and service utilization. Over the last five years, the MOH expanded eCHIS functionality and the number of implementation sites.



## ACHIEVEMENTS



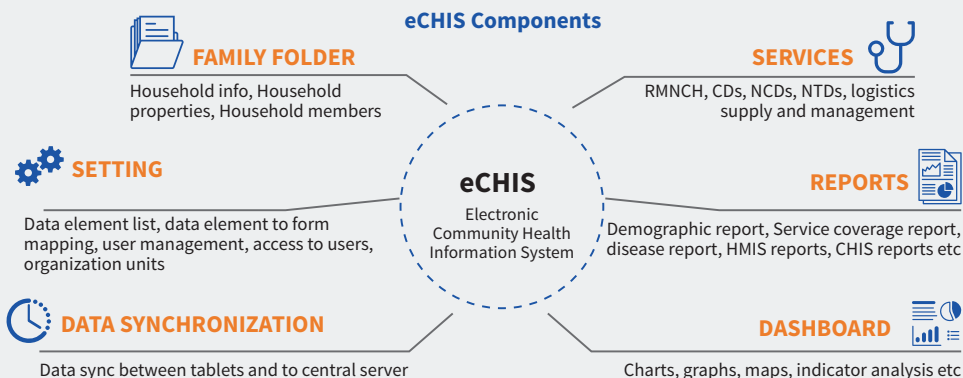
**FAMILY FOLDER, RMNCH and COMMUNICABLE DISEASES (TB & MALARIA)** modules for eCHIS development completed



**1,250**

**HEALTH POSTS**

health posts using eCHIS across 4 agrarian regions



Graphic acronyms

**CDs**  
**NCDs**

Communicable Diseases  
Non-Communicable Diseases

**NTDs**  
**RMNCH**

Neglected Tropical Diseases  
Reproductive, Maternal, Neonatal and Child Health



# ELECTRONIC MEDICAL RECORDS (EMR) SYSTEM

An EMR is a digital version of a paper chart or register created and managed by health services providers at a health organization to capture and store patient health information.



## ACHIEVEMENTS



# 470

**ANTIRETROVIRAL THERAPY  
(ART) SITES DEPLOYED**

EMR software updated to maintain patient records of People Living with HIV (PLHIV) taking antiretroviral medications.



# HEALTHNET

The Ministry of Health has been working with Ethio Telecom to provide internet connection to all health facilities and health administration units across the country via HealthNet, a Virtual Private Network (VPN) service. HealthNet allows these sites to access digital tools such as DHIS2 to enter data and submit reports in a timely manner.



**DHIS2 and Logistics Management Information System**  
systems accessible through  
HealthNet

**3,605**

**HEALTH INSTITUTIONS**  
have been connected to  
HeathNet

## KEY BENEFITS OF HEALTHNET



Improve data quality and use



Improve timeliness of reports



Improve accuracy and completeness  
of health data



Provide timely feedback to hospitals, health centers  
and woreda offices



Usable by multiple health systems



Future efficiency and capacity thanks to  
improved network connectivity



Provide data access during emergency  
internet shut-down



# HEALTH MANAGEMENT INFORMATION SYSTEM (HMIS)

An HMIS supports routine collection, aggregation, analysis, presentation and use of health data for evidence-based decision making by health workers, managers and policy makers. Since the launch of the Information Revolution Roadmap, Ethiopia deployed the electronic DHIS2 to support HMIS activities.



## ACHIEVEMENTS



### DEPLOYED DHIS2

system for HMIS data collection, analysis and reporting



### DHIS2 HEALTH SITE ACCESS

**3,605** **1,600**  
ONLINE OFFLINE



**7,000**

### DATA WORKERS

trained on DHIS2 use

**4,000**

### DATA WORKERS

trained on advanced DHIS2 data analytics tools



**131**

### CORE HMIS INDICATORS



### IMPROVED QUALITY OF HMIS DATA

data completeness and timeliness



### DHIS2 ACADEMIC CENTER OF EXCELLENCE

opened at Gondar  
University



### EVIDENCE-BASED DECISIONS BY HEALTH WORKERS



# MASTER FACILITY REGISTRY (MFR)



The MFR is a platform for collecting, storing and sharing authoritative information about health facilities in the country. The MFR data can be used by public and private sector stakeholders to align their systems and programs.



**Deployed** the MFR  
with a public portal



**Developed** MFR  
data accuracy and  
approval protocols



# PUBLIC HEALTH EMERGENCY MANAGEMENT SYSTEM (PHEM)

Public health emergency management (PHEM) is the process of anticipating, preventing, preparing for, detecting, responding to, controlling and recovering from consequences of public health threats to minimize the health and economic impacts.



The MOH deployed the country's PHEM in 2018 to capture and analyze public health emergency data.



Developed PHEM data entry and PHEM Export to facilitate process of mapping and translating data between the Ethiopian Calendar in DHIS2 and epidemiological weeks in PHEM.



Developed a COVID-19 surveillance and tracking system using DHIS2 with the opportunity to use post-COVID-19 for other disease tracking activities. The system includes a situation monitoring dashboard, geospatial analysis and risk mapping, and key performance indicators.



# SUPPLY CHAIN SYSTEMS



Ethiopia deployed and enhanced a suite of interoperable ICT systems for managing health system supply chain information in support of the Information Revolution (IR) agenda.

## Vitas

Vitas is a procurement, inventory and warehouse management technology system



mBraná is a mobile inventory management system for vaccines



Dagu is an inventory management system for health commodities at the facility level



Fanos is a supply chain dashboard for decision making

## ACHIEVEMENTS

### EXPANDING FUNCTIONALITY

on Vitas to support Global Standards 1 (GS1) enabled tracking of select program commodities and online ordering

### REDESIGNING DAGU

to be interoperable with Vitas and Fanos

### DEPLOYING mBRANA

to track distribution of bed nets in malaria risk areas